

B4 (b) a first layer on the downstream substrate, the first layer comprising a first support and a first platinum component;

(2) the upstream section comprising:

(a) an upstream substrate; and

(b) a second layer on the upstream substrate, the second layer comprising a second support and a SOx sorbent component, wherein the SOx sorbent component is selected from the group consisting of  $\text{MgAl}_2\text{O}_4$ ,  $\text{MnO}$ ,  $\text{MnO}_2$ , and  $\text{Li}_2\text{O}$ .

---

B5 42. (amended) The axial layered catalyst composite as recited in claim 41, wherein the SOx sorbent component is  $\text{Li}_2\text{O}$ .

---

106. (amended) A method of forming a layered catalyst composite which comprises the steps of:

B4 (a) forming a first layer comprising:

(i) a first support; and

(ii) a first platinum component; and

(b) coating the first layer with a second layer comprising:

(i) a second support; and

(ii) a SOx sorbent component, wherein the SOx sorbent component is selected from the group consisting of  $\text{MgAl}_2\text{O}_4$ ,  $\text{MnO}$ ,  $\text{MnO}_2$ , and  $\text{Li}_2\text{O}$ .

---

B7 109. (amended) A method of forming a layered catalyst composite which comprises the steps of:

(a) combining a water-soluble or dispersible first platinum component and a finely divided, high surface area refractory oxide with an aqueous liquid to form a first solution or dispersion which is sufficiently dry to absorb essentially all of the liquid;

## In The Claims

Kindly amend the claims as follows. (marked up copy)

1. (amended) A layered catalyst composite comprising a first layer and a second layer:

(a) the first layer comprising a first support and a first platinum component; and

(b) the second layer comprising a second support and a SOx sorbent component,

wherein the SOx sorbent component is selected from the group consisting of  $\text{MgAl}_2\text{O}_4$ ,  $\text{MnO}$ ,  $\text{MnO}_2$ , and  $\text{Li}_2\text{O}$  [having a free energy of formation from about 0 to about -90 Kcal/mole at 350°C].

9. (amended) The layered catalyst composite as recited in claim 8, wherein the SOx sorbent component is [MgO or]  $\text{Li}_2\text{O}$ .

34. (amended) An axial layered catalyst composite comprising an upstream section and a downstream section:

(1) the downstream section comprising:

(a) a downstream substrate; and

(b) a first layer on the downstream substrate, the first layer comprising a first support and a first platinum component;

(2) the upstream section comprising:

(a) an upstream substrate; and

(b) a second layer on the upstream substrate, the second layer comprising a second support and a SOx sorbent component, wherein the SOx sorbent component is

selected from the group consisting of  $\text{MgAl}_2\text{O}_4$ ,  $\text{MnO}$ ,  $\text{MnO}_2$ , and  $\text{Li}_2\text{O}$  [having a free energy of formation from about 0 to about -90 Kcal/mole at 350°C].

42. (amended) The axial layered catalyst composite as recited in claim 41, wherein the  $\text{SO}_x$  sorbent component is [ $\text{MgO}$  or]  $\text{Li}_2\text{O}$ .

106. (amended) A method of forming a layered catalyst composite which comprises the steps of:

(a) forming a first layer comprising:

(i) a first support; and

(ii) a first platinum component; and

(b) coating the first layer with a second layer comprising:

(i) a second support; and

(ii) a  $\text{SO}_x$  sorbent component, wherein the  $\text{SO}_x$  sorbent component is selected from the group consisting of  $\text{MgAl}_2\text{O}_4$ ,  $\text{MnO}$ ,  $\text{MnO}_2$ , and  $\text{Li}_2\text{O}$  [having a free energy of formation from about 0 to about -90 Kcal/mole at 350°C].

109. (amended) A method of forming a layered catalyst composite which comprises the steps of:

(a) combining a water-soluble or dispersible first platinum component and a finely divided, high surface area refractory oxide with an aqueous liquid to form a first solution or dispersion which is sufficiently dry to absorb essentially all of the liquid;

(b) forming a first layer of the first solution or dispersion on a substrate;

(c) converting the first platinum component in the resulting first layer to a water-insoluble form;

(d) combining a water-soluble or dispersible SOx sorbent component, wherein the SOx sorbent component is selected from the group consisting of  $\text{MgAl}_2\text{O}_4$ ,  $\text{MnO}$ ,  $\text{MnO}_2$ , and  $\text{Li}_2\text{O}$  [having a free energy of formation from about 0 to about -90 Kcal/mole at 350°C]., and a finely divided, high surface area refractory oxide with an aqueous liquid to form a second solution or dispersion which is sufficiently dry to absorb essentially all of the liquid;

(e) forming a second layer of the second solution or dispersion on the first layer; and

(f) converting the second platinum component in the resulting second layer to a water-insoluble form.

Kindly delete claims 5, 7, 8, 39, 40, and 41.